§ 63.456

§63.456 [Reserved]

§63.457 Test methods and procedures.

- (a) *Initial performance test*. An initial performance test is required for all emission sources subject to the limitations in §§ 63.443, 63.444, 63.445, 63.446, and 63.447, except those controlled by a combustion device that is designed and operated as specified in § 63.443(d) (3) or (d) (4).
- (b) Vent sampling port locations and gas stream properties. For purposes of selecting vent sampling port locations and determining vent gas stream properties, required in §§63.443, 63.444, 63.445, and 63.447, each owner or operator shall comply with the applicable procedures in paragraphs (b)(1) through (b)(6) of this section.
- (1) Method 1 or 1A of part 60, appendix A, as appropriate, shall be used for selection of the sampling site as follows:
- (i) To sample for vent gas concentrations and volumetric flow rates, the sampling site shall be located prior to dilution of the vent gas stream and prior to release to the atmosphere;
- (ii) For determining compliance with percent reduction requirements, sampling sites shall be located prior to the inlet of the control device and at the outlet of the control device; measurements shall be performed simultaneously at the two sampling sites; and
- (iii) For determining compliance with concentration limits or mass emission rate limits, the sampling site shall be located at the outlet of the control device.
- (2) No traverse site selection method is needed for vents smaller than 0.10 meter (4.0 inches) in diameter.
- (3) The vent gas volumetric flow rate shall be determined using Method 2, 2A, 2C, or 2D of part 60, appendix A, as appropriate.
- (4) The moisture content of the vent gas shall be measured using Method 4 of part 60, appendix A.
- (5) To determine vent gas concentrations, the owner or operator shall conduct a minimum of three test runs that are representative of normal conditions and average the resulting pollutant concentrations using the following procedures.

- (i) Method 308 in Appendix A of this part shall be used to determine the methanol concentration.
- (ii) Except for the modifications specified in paragraphs (b)(5)(ii)(A) through (b)(5)(ii)(K) of this section, Method 26A of part 60, appendix A shall be used to determine chlorine concentration in the vent stream.
- (A) Probe/Sampling Line. A separate probe is not required. The sampling line shall be an appropriate length of 0.64 cm (0.25 in) OD Teflon® tubing. The sample inlet end of the sampling line shall be inserted into the stack in such a way as to not entrain liquid condensation from the vent gases. The other end shall be connected to the impingers. The length of the tubing may vary from one sampling site to another, but shall be as short as possible in each situation. If sampling is conducted in sunlight, opaque tubing shall be used. Alternatively, if transparent tubing is used, it shall be covered with opaque tape.
- (B) Impinger Train. Three 30 milliliter (ml) capacity midget impingers shall be connected in series to the sampling line. The impingers shall have regular tapered stems. Silica gel shall be placed in the third impinger as a desiccant. All impinger train connectors shall be glass and/or Teflon®.
- (C) Critical orifice. The critical orifice shall have a flow rate of 200 to 250 ml/min and shall be followed by a vacuum pump capable of providing a vacuum of 640 millimeters of mercury (mm Hg). A 45 millimeter diameter in-line Teflon 0.8 micrometer filter shall follow the impingers to protect the critical orifice and vacuum pump.
- (D) The following are necessary for the analysis apparatus:
- (1) Wash bottle filled with deionized water:
- (2) 25 or 50 ml graduated burette and stand:
- (3) Magnetic stirring apparatus and stir bar;
 - (4) Calibrated pH Meter;
 - (5) 150-250 ml beaker or flask; and
 - (6) A 5 ml pipette.
- (E) The procedures listed in paragraphs (b)(5)(ii)(E)(1) through (b)(5)(ii)(E)(7) of this section shall be used to prepare the reagents.